

REMARKS/ARGUMENTS

On pages 2 of the Action, claims 1-17 were rejected under 35 U.S.C. 102(b) as being anticipated by Nakamura et al. '888.

In reply thereto, applicant has canceled the claims and added claims 18-34 to define applicant's invention more clearly over the prior art of record.

As clearly defined in the new claim 18, applicant's invention comprises of the step of blowing out air to the intestine pushing member from the air outlet of the air blowing means so as to move the intestine pushing member toward the intestine receiving member over the stuffing tube, wherein the intestine pushing member is disposed between the air blowing means and the intestine receiving member.

As clearly defined in the new claims 22 and 25, applicant's invention comprises the intestine pushing member including the hollow member having the air receiving surface and the intestine-pushing-member driving means having the air blowing means with the air outlet disposed on the opposite side of the intestine receiving member with respect to the intestine pushing member.

In the invention claimed in the claims 18, 22, and 25, air blown out from the air outlet pushes the air  
receiving surface of the hollow member of the intestine  
pushing member so that the intestine pushing member moves  
over the stuffing tube. Accordingly, the pushing force  
applied to the natural intestine casing by the intestine  
pushing member can be adjusted accurately by adjusting the  
air blown out from the air outlet. Consequently, the

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intestine pushing member can advance the natural intestine casing without excessively compressing the shirred portion of the natural intestine casing disposed between the intestine pushing and receiving members.

With respect to the prior art, Nakamura et al. discloses that the intestine pusher (117) is connected to the air cylinder (119) by means of the rod (118) (column 15, lines 50-51), that is, the force of air acts on the intestine pusher (117) through the rod (118) and the air cylinder (119). Accordingly, the intestine pusher (117) is affected by not only the force of the air but also the force caused by the friction resistance and inertia of the rod (118) and air cylinder (119). Consequently, it is difficult to obtain the designated force applied to the intestine pusher (117) by adjusting the air.

Nakamura et al. further discloses the intestine pushing collar (67) and the pushing member (144 and 154). However, they are manually operated by the operator, or mechanically pushing by air cylinder (column 20, lines 12-18, and column 25, lines 36-38, and column 27, lines 12-14).

As stated above, Nakamura et al. neither discloses nor suggests any intestine pushing member which moves over the stuffing tube by receiving the air blown out from the air outlet.

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~~As defined in the new claim 32, applicant's~~  
invention comprises the intestine pushing member including the hollow member having the air receiving surface and formed of a resin, in which the metallic member fits, the intestine-pushing-member driving means having the air blowing means with the air outlet disposed on the opposite side of the intestine receiving member with respect to the

intestine pushing member, for blowing out air from the air outlet toward the air receiving surface to move the intestine pushing member over the stuffing tube, and the detecting means having the proximity sensor and disposed at the detective position for detecting the metallic annular member of the intestine pushing member.

In the applicant's invention claimed in claim 32, the air blown out from the air outlet pushes the air receiving surface of the hollow member made of a lightweight resin so that the intestine pushing member is driven over the stuffing tube by small force of the air.

Also, since the intestine pushing member is provided with the metallic annular member, the proximity sensor can detect the intestine pushing member even if the intestine pushing member is rotating. Accordingly, the intestine pushing member can be rotated with the rear end portion of the natural intestine casing at the detecting process. Consequently, a possible risk at the detecting process that the intestine pushing member causes damage on the rear end portion of the natural intestine casing, while pushing the rear end portion by the intestine pushing member, is prevented (specification, page 19, lines 15-20).

In addition, since the proximity sensor is provided at the detective position for detecting the metallic annular member, ~~the proximity sensor can detect in~~ the vicinity of the metallic annular member even under the condition that water is scattered from the natural intestine casing. Consequently, the detecting means can generate the detection signal more accurately. ~~-----~~ (specification, page 34, line 22 to page 35, line 3).

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Nakamura et al. discloses the intestine pushing collar (67), intestine pusher (117), and pushing member (144 and 154). However, none of them is made of a resin and comprises any metallic annular member. Also, Nakamura et al. does not disclose or suggest any detecting means including the proximity sensor for detecting the metallic annular member.

As defined in the new claim 20, applicant's invention comprises the step of blowing out air from the air outlet of the air blowing means to the air receiving surface of the hollow member so as to move the intestine pushing member over the stuffing tube, wherein the intestine pushing member is disposed on the distal end side with respect to the air blowing means. Accordingly, it is believed that the claim 20 is patentable for the same reasons stated above with respect to with claim 18.

As defined in the claim 33, applicant's invention comprises the intestine pushing member including the air receiving surface, and the intestine-pushing-member driving means having the air blowing means with the air outlet disposed on the opposite side of the distal end of the stuffing tube with respect to the intestine pushing member. Accordingly, it is believed that the claim 33 is patentable for the same reasons stated above with respect to with claims 22 and 25.

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In the applicant's invention claimed in the above claims 20 and 33, the intestine pushing member including the hollow member having the air receiving surface and the air blowing means having the air outlet are provided, which are the technical features that the other claims also define commonly. The two technical features are provided

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for the third object of the invention that generating a signal accurately for stopping the discharging the material into the natural intestine casing subsequently to pushing the rear end portion of the natural intestine casing by a simple method (specification, page 2, lines 6-12). Since the two technical features enables the third object of the invention, the invention provides the method and apparatus which excel in sanitation and is capable of reducing the waste of the natural intestine casing and the material and providing an inexpensive apparatus (specification, page 38, lines 6-14).

For these reasons it is submitted that applicant's invention recited in claims 18-34 is patentable over Nakamura et al.

Applicant has amended specifications to correct two typing errors. No new matter is introduced.

Also, applicant has amended drawings, Figs. 3-9 to correct "125A" to --125--. No new matter is introduced.

The numbers of the total claims and independent claims are 18 and 6, respectively. Accordingly, required fee in amount of \$86 (small entity) for independent claims in excess of three is enclosed (fee for the fourth independent claim was already paid on 02/06/03).

Three-month extension fee is enclosed.

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~~In view of the foregoing, it is respectfully~~  
requested that this application be reconsidered, claims 18-34 allowed, and this case passed to issue.

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